AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.-11. (Canceled)

12. (Withdrawn) An electrical machine, comprising:

a shaft defining an axis;

two laminated rotor cores arranged on the shaft in axially spaced-apart relationship, each of the laminated rotor cores having axial cooling channels;

a first ring arranged between the two laminated rotor cores and having radial flow channels in fluid communication with the cooling channels of the laminated rotor cores;

two laminated stator cores for cooperation with the laminated rotor cores in one-to-one correspondence, said laminated stator cores having axial cooling channels; and

a second ring arranged between the two laminated stator cores and having radial flow channels in fluid communication with the cooling channels of the laminated stator cores.

13. (Withdrawn) The electrical machine of claim 12, wherein each of the first and second rings has radial webs.

14. (Withdrawn) The electrical machine of claim 12, wherein the two laminated rotor cores and the two laminated stator cores are pressed against one another.

15. (Withdrawn) The electrical machine of claim 12, wherein at least one of the laminated rotor cores and laminated stator cores is chamfered at an area at which a flow of coolant is deflected from an axial flow to a radial flow.

16. (Currently amended) An electrical machine, comprising:

a housing;

a laminated stator core arranged in the housing and terminating in an end winding area; and

a laminated rotor core arranged in the housing and terminating in an end winding area,

wherein at least one member selected from the group consisting of the laminated stator core and the laminated rotor core has an axial cooling channel,

wherein at least one of the end winding areas accommodates ~~a~~ an open-ended cooling channel protrusion fluidly extending the cooling channel of the member in axial prolongation ~~of the cooling channel and in fluid communication with the cooling channel of the member~~ for allowing a discharge of coolant in axial direction from the housing to the outside.

17. (Previously presented) The electrical machine of claim 16, wherein the housing includes a mounting plate, said member being the laminated stator core, with the cooling channel protrusion configured as a tube guided through the mounting plate.

18. (Previously presented) The electrical machine of claim 16, wherein the member is the laminated rotor core, and further comprising a rotor clamping ring assembly for maintaining integrity of the laminated rotor core, wherein the cooling channel protrusion is part of the rotor clamping ring assembly.

19. (Previously presented) The electrical machine of claim 18, wherein the housing includes a mounting plate, said rotor clamping ring assembly constructed to have a flow channel for guiding the coolant through the mounting plate, and further comprising a seal arranged between the rotor clamping ring assembly and the mounting plate.

20. (Currently amended) The electrical machine of claim 16, wherein the member has a plurality of said cooling channel in circumferential spaced-apart relationship, and further comprising a plurality of said cooling channel protrusion communicating with the plurality of cooling channels in one-to-one correspondence, wherein every other one of the cooling channels is connected to cooling channel protrusions on one end of the member, and the other one of the cooling channels ~~us~~ is connected to cooling channel protrusions on an opposite end of the member.

21. (Currently amended) A method for cooling an electrical machine, comprising the steps of:

passing a coolant through at least one axial cooling channel of a member selected from the group consisting of the laminated stator core and the laminated rotor core and disposed in a housing; and

transferring the coolant from the least one cooling channel through [[a]] an open-ended cooling channel protrusion ~~disposed~~ fluidly extending the cooling channel of the member in axial prolongation ~~of the cooling channel~~ in an end winding area of the member for discharge of coolant in axial direction from the housing to the outside.

22. (Previously presented) The method of claim 21, wherein the coolant flows through a plurality of said axial cooling channel of the member in circumferential spaced-apart relationship such that coolant flows through the cooling channels alternately in opposite directions.